Optical Follow-up of X-ray and Gamma-ray Transients

Monday 10 October 2022 11:00 (30 minutes)

I review the optical follow-up programme on high energy (X-ray and γ -ray) transient and variable sources, focusing on results from the Southern African Large Telescope (SALT) but also including supporting observations using SAAO and other facilities. This programme began in 2016 and various classes of objects have been observed, including γ -ray flaring blazars, high and low mass X-ray binaries, cataclysmic variables and changing-look AGN. This work has been supplemented with supporting multi-wavelength observations with other facilities (e.g. Fermi, Swift, eROSITA, NICER, HXMT, XMM-Newton, HESS and MeerKAT). I will highlight results covering different classes of objects, particularly focusing on LMXB black hole transients, transitional millisecond pulsars, white dwarf "pulsars" and X-ray QPE discoveries following from the eROSITA survey. Future prospects of transient follow-up in the era of the Rubin Observatory's LSST will also be discussed.

Track

Binaries

Primary author: BUCKLEY, David (South African Astronomical Observatory)Presenter: BUCKLEY, David (South African Astronomical Observatory)Session Classification: Plenary 1